

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) Seed of corn inbred line designated SE8505, representative seed of said line having been deposited under ATCC Accession No. [] PTA-5332.
2. (Original) A corn plant, or parts thereof, produced by growing the seed of claim 1.
3. (Original) Pollen of the plant of claim 2.
4. (Original) An ovule of the plant of claim 2.
5. (Original) A method of producing a male sterile corn plant comprising crossing the corn plant of claim 2 with a male sterile corn plant and harvesting the resultant seed.
6. (Original) A tissue of regenerable cells from the corn plant of claim 2.
7. (Currently Amended) [A] The tissue culture according to claim 6, [the cells or protoplasts of the tissue culture being] the tissue culture being obtained from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
8. (Original) A corn plant regenerated from the tissue culture of claim 6, wherein the regenerated plant is capable of expressing all the morphological and physiological characteristics of inbred line SE8505.
9. (Original) A method for producing a hybrid corn seed comprising crossing a first inbred parent corn plant with a second inbred parent corn plant and harvesting the resultant hybrid corn seed, wherein said first inbred parent corn plant or second said parent corn plant is the corn plant of claim 2.
10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) A method for producing inbred SE8505, representative seed of which have been deposited under ATCC Accession No. [____] PTA-5332, comprising:

- a) planting a collection of seeds comprising seed of a hybrid, one of whose parents is inbred SE8505, said collection also comprising seed of said inbred;
- b) growing plants from said collection of seed;
- c) identifying inbred parent plants;
- d) controlling pollination in a manner which preserves the homozygosity of said inbred parent plant; and
- e) harvesting the resultant seed.

14. (Currently Amended) The process of claim 13 wherein step (c) comprises identifying plants with decreased vigor relative to hybrid plants.

15. (Currently Amended) A method for producing a SE8505-derived corn plant, comprising:

- a) crossing inbred corn line SE8505, representative seed of said line having been deposited under ATCC accession number [____] PTA-5332, with a second corn plant to yield progeny corn seed; and,
- b) growing said progeny corn seed, under plant growth conditions, to yield said SE8505-derived corn plant[;].
- [c) crossing said SE8505-derived corn plant with itself or another corn plant to yield additional SE8505-derived progeny corn seed;
- d) growing said progeny corn seed of step (c) under plant growth conditions, to yield additional SE8505-derived corn plants; and
- e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further SE8505-derived corn plants.]

16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (New) A method for producing a corn plant that contains a transgene operably linked to a regulatory element, comprising crossing the corn plant of claim 2 with either a second plant of another corn line, or a transformed corn plant of the line SE8505, each containing a transgene, so that the progeny that result from the cross contains the transgene operably linked to a regulatory element, wherein said transgene confers a trait selected from the group consisting of herbicide resistance, bacterial disease resistance, male sterility, increased fatty acid content, decreased phytate content, resistance to fungal, resistance to viral disease, modified carbohydrate composition and insect resistance.
23. (New) A corn plant produced by the method of claim 22.
24. (New) A method for producing a male sterile corn plant comprising rendering the corn plant of claim 2 male sterile by a method selected from the group consisting of manual detasseling, mechanical detasseling and application of a gametocide.
25. (New) A method for producing a transgenic corn plant comprising transforming the corn plant of claim 2 with a transgene wherein the transgene confers a characteristic selected from the group consisting of herbicide resistance, insect resistance, resistance to bacterial diseases, resistance to fungal disease, resistance to

viral disease, male sterility, increased fatty acid content, decreased phytate content and modified carbohydrate composition.

26. (New) A transgenic corn plant produced by the method of claim 25.

27. (New) A method of introducing a desired trait into corn inbred line SE8505 comprising:

- a) crossing SE8505 plants with plants of another corn line that comprise a desired trait to produce F₁ progeny plants, wherein representative seed of corn inbred line have been deposited under ATCC Accession No. PTA-5332;
- b) selecting F₁ progeny plants that have the desired trait to produce selected F₁ progeny plants;
- c) crossing the selected progeny plants with SE8505 to produce backcross progeny plants;
- d) selecting for backcross progeny plants that have the desired trait and physiological and morphological characteristics of maize inbred line SE8505 to produce selected backcross progeny plants; and
- e) repeating steps (c) and (d) three or more times to produce selected fourth or higher backcross progeny plants that comprise the desired trait and substantially all of the physiological and morphological characteristics of maize inbred line SE8505 as listed in Table 1.

28. (New) A plant produced by the method of claim 27, wherein the plant has the desired trait and all of the physiological and morphological characteristics of corn inbred line SE8505 listed in Table 1 when grown in the same environmental conditions.

29. (New) A method for producing corn seed comprising crossing the corn plant of claim 2 with itself or a second inbred parent corn plant and harvesting resultant corn seed.

30. (New) A male sterile SE8505 inbred corn plant produced by the method of claim 24.

31. (New) A transgenic corn plant, or a part thereof produced by transforming the corn plant, or a part thereof of claim 2 with an expression vector comprising a transgene that confers upon the corn plant or a part thereof, insect resistance, disease resistance or virus resistance.

32. (New) The corn plant according to claim 31, wherein said expression vector further comprises a marker gene.

33. (New) Seed produced by selfing the plant of claim 2, wherein said seed produce plants having all the physiological and morphological characteristics of inbred corn line SE8505, representative seed of said line having been deposited under ATCC Accession No. PTA-5332.

34. (New) The method according to claim 9, wherein the first inbred parent corn plant is a female.

35. (New) The method according to claim 9, wherein the first inbred parent corn plant is a male.

36. (New) The corn plant part of claim 2, wherein the part is selected from the group consisting of a pollen, an ovule, a stalk, a root, a leaf, a tassel, an anther, a root tip, a silk, a flower, a kernel, an ear, a cob and a husk.